Work Order ID 52331

Tuesday, September 22, 2009 3:12:30 PM

Item ID: D3394-043
Revision ID: A
Item Name: Lug Assembly

Accept

Setup **Start**
Stop

Start Date: 9/23/2009 **Start Qty:** 40.00
Required Date: 10/9/2009 **Req'd Qty:** 40.00
Reference:

Cust Item ID:
Customer:

Approvals: **Process Plan:** RL **Date:** 09-9-23 **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run **Start**
Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D3394	Rev A								
100	BAND SAW	0.00							
Bandsaw	**Memo**	0.00							
Jeaspa Bandsaw	Cut Blank to .850"								
110	~~Outsource process~~ - Machining	0.00							
Outsource5	**Memo**	0.00							
Outsource process - Machining	~~Send Blanks To:Metec/Mast Precision~~ Machining ☐P/O: _____ ☐Machine D3394-3 as per Dwg D3394								
120	Receive & Inspect for Damage & Mat'l Certs	0.00							
Packaging	**Memo**	0.00							
Packaging									

105 HAAS1

SP 09/10/24

PTO ~~[illegible]~~

SP 09/21/02

QC2

SP 09/11/02

Dart Aerospace Ltd

W/O: 52331		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
09-11-13	130/120	QC 6 to change to QC 8 / & QC2 instead of receiving. Now machined in house. per change		09.11.16		09-11-13	09-11-13

Part No: D3394-043 PAR #: _____ Fault Category: machined parts NCR: (Yes) No DQA: _____ Date: 09-11-18

Resolution: (A) scrap / (B) accepted Disposition: (A) scrap / (B) use as is QA: N/C Closed: _____ Date: 09-11-18

NCR: 52331		WORK ORDER NON-CONFORMANCE (NCR)						
			Corrective Action Section B					
DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector
A 09/10/31	110	One part was machined with a Bigger Bore than 1.100". R.C. Prog error program Took wrong Tools.	09SICM2	Replace Batch # 45800 Qty 1 / correct tool is now pick on program	SB 09/10/31 / JFS 09/11/13	09-11-13	09SICM2	09-11-13
B	110	five part the dimension of .157 was too short R.C. Drawing miss info. Machinist can't measure dimension	09.11.02 per QS1 042	Replace Batch # 45800 PARTS OK, CP TRIED PARTS ON X-TUBE MEASURES .306" per dwg. 09.11.02	SB 09/10/31	09/11/06	09.11.02 per QS1 042	09/11/06

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Work Order ID 52331

Tuesday, September 22, 2009 3:12:30 PM

Item ID: D3394-043
Revision ID: A
Item Name: Lug Assembly

Accept

Setup Start
Stop

Start Date: 9/23/2009 **Start Qty:** 40.00
Required Date: 10/9/2009 **Req'd Qty:** 40.00
Reference:

Cust Item ID:
Customer:

Run Start
Stop

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC~~6~~ Inspect dimensions to drawing	0.00	mw= 09/11/03			45			
QC QC8 Quality Control	Memo	0.00							
140	Chemical Conversion Coat per QSI005 4.1	0.00	09/11/10			45x	0		
HandFinish Hand Finishing	Memo	0.00							
150	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum M112148	0.00	=> 09/11/12			x45	0		
Powdercoat Powder Coating	Memo START TIME: 10:00AM ☐OVEN TEMPERATURE: 10:30A ☐FINISH TIME: 3209=	0.00							

Work Order ID 52331

Tuesday, September 22, 2009 3:12:30 PM

Item ID: D3394-043
Revision ID: A
Item Name: Lug Assembly

Accept

Setup **Start**
Stop

Start Date: 9/23/2009 **Start Qty:** 40.00
Required Date: 10/9/2009 **Req'd Qty:** 40.00
Reference:

Cust Item ID:
Customer:

Run **Start**
Stop

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC3- Inspect Part Finish	0.00	BR	09-11-12		45			
QC	**Memo**	0.00							
Quality Control									
170		0.00							
Small Fab	Small Fab								
Small Fab	**Memo**	0.00							
	Assemble as per Dwg D3394								
180	QC5- Inspect part completeness to step on W/O	0.00				45			
QC	**Memo**	0.00							
Quality Control									

Work Order ID 52331

Tuesday, September 22, 2009 3:12:30 PM

Item ID: D3394-043
Revision ID: A
Item Name: Lug Assembly

Accept

Setup Start
Stop

Start Date: 9/23/2009 **Start Qty:** 40.00
Required Date: 10/9/2009 **Req'd Qty:** 40.00
Reference:

Cust Item ID:
Customer:

Run Start
Stop

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Identify as per dwg & Stock Location: 475	0.00							
Packaging						9/11/16			
Packaging	**Memo**	0.00							
200	QC21- Final Inspection - Work Order Release	0.00					09/11/16		
QC	**Memo**	0.00							
Quality Control									

mf
09-11-16

Picklist Print

Tuesday, September 22, 2009 3:12:30 PM

Work Order ID: 52331

Parent Item: D3394-043RevA

Parent Item Name: Lug Assembly

Comments:

Start Date: 9/23/2009 **Required Date:** 10/9/2009

Start Qty: 40.00 **Required Qty:** 40.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS35489-93 GROMMET		Purchased	No			100	Each	220.0000	80.0000		09/11/13	

Warehouse Location	Loc Qty	Loc Code	
Main Warehouse			
ST	220		
106168	29		
111424	2		
111477	89		24
112492	100		66

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2423RevB1 Lug Extrusion		Manufactured	No			110	f	684.6908	2.9474			

Warehouse Location	Loc Qty	Loc Code	
Main Warehouse			
ST	684.69078		
43722	213.01468		
~~44529~~	22.39		
45800	449.2861		2.9474 09/10/29

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3394-3PRevA Lug		Purchased	No			170	Each	0.0000	40.0000		09/11/13	

N A MF 09-11-16

BAR 3B1

DART AEROSPACE LTD	Work Order:	52331
Description:	Part Number:	D3394-3
Inspection Dwg: Rev:		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [ ] Prototype

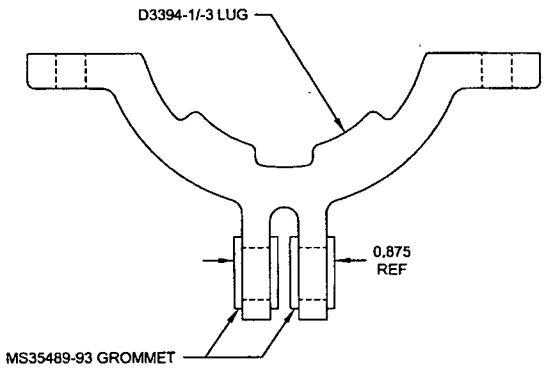
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
4.450	±.010	4.450	✓			
.400	"	.398	✓			
.250	"	.251	✓			
.345	"	.352	✓			
.306	"	.304	✓			
~~.350~~	~~"~~					
3.700	"	3.700	✓			
.375	"	.374	✓			
.750	"	.752	✓			
R.125	Ref	.125	✓			
.100	"					
.735	"	.725	✓			
1.910	"	1.913	✓			
R1.250	"	1.250				
R.375	"	.375	✓			
Ø .453	+.006 -.001	.454	✓			
Ø .750	±.008 -.001	.750	✓			
Ø .257	+.006 -.001	.259	✓			

Measured by:		Audited by:		Prototype Approval:	N/A
Date:	09/10/28	Date:	09/11/03	Date:	N/A

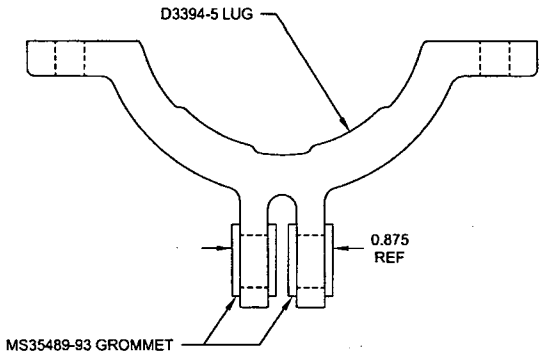
Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

QTY. -041	QTY. -043	QTY. -045	PART NUMBER	DESCRIPTION
X			D3394-041	LUG ASSEMBLY
	X		D3394-043	LUG ASSEMBLY
		X	D3394-045	LUG ASSEMBLY
1			D3394-1	LUG
	1		D3394-3	LUG
		1	D3394-5	LUG
2	2	2	MS35489-93	GROMMET

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 52331



D3394-041/-043 LUG ASSEMBLY



D3394-045 LUG ASSEMBLY

RELEASED
09/06/25 AAD

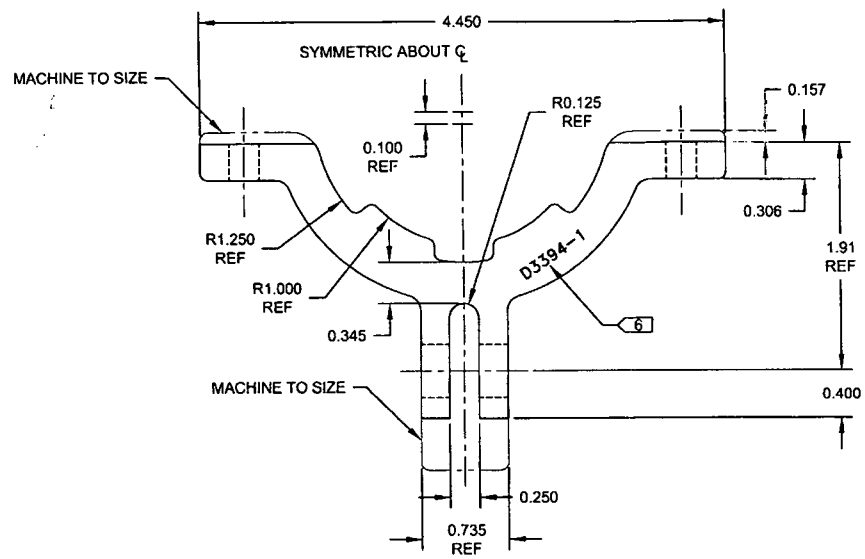
NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: N/A
7) WEIGHT: 0.20 lbs APPROX

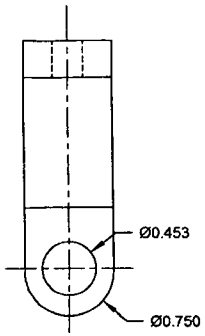
REV.	DESCRIPTION	BY	DATE
B	ADDED -045. SHT 4 ADDED FILLETS IN SECTION A-A. SEE PAR 152	AJS	09.04.02
A	NEW ISSUE	PH	05.02.14

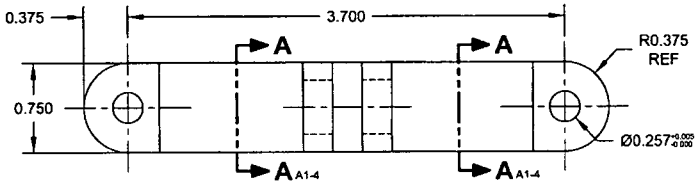
DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3394	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.		LUG	NTS
DATE	09.04.02		

COPYRIGHT © 2005 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

52331







D3394-1 LUG

RELEASED 09/06/25

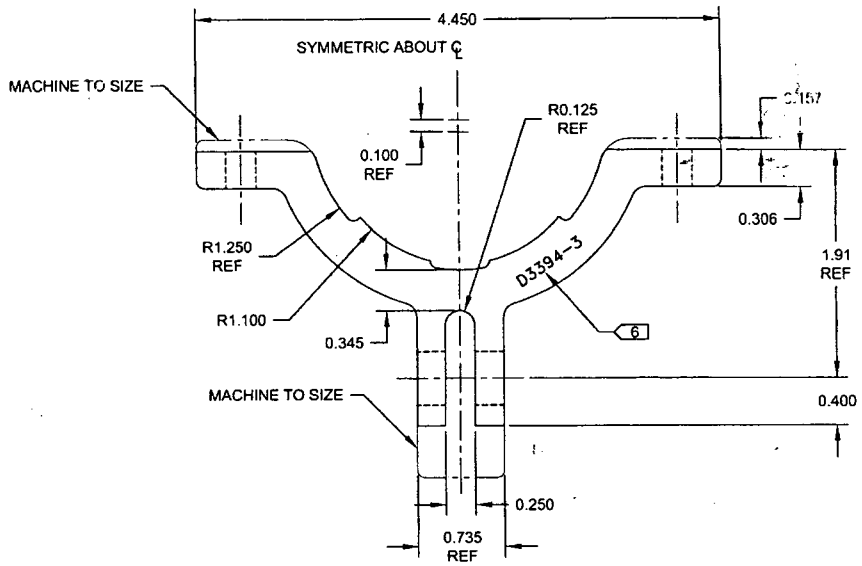
NOTES:

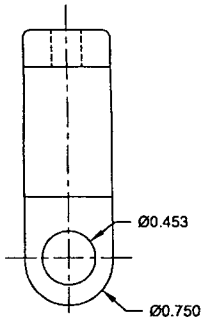
1) MATERIAL: MAKE FROM D2423
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
   POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: ENGRAVE PART NUMBER TO DEPTH OF 0.010±0.005 IN THIS LOCATION, WITH TOOL A TIP RADIUS OF 0.015±0.005
7) WEIGHT: 0.18 lbs

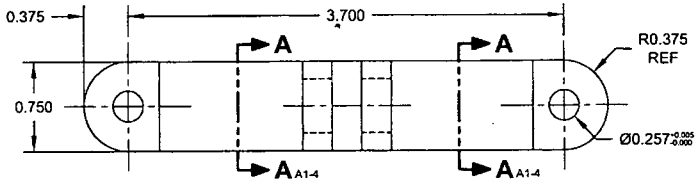
DESIGN	PH	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	AJS	
CHECKED		DRAWING NO. D3394 — REV. B — SHEET 2 OF 4
MFG. APPR.		
APPROVED		TITLE: LUG — SCALE: NTS
DE APPR.		
DATE	09.04.02	

COPYRIGHT ©2005 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD

52331







D3394-3 LUG

RELEASED 09/26/25 MP

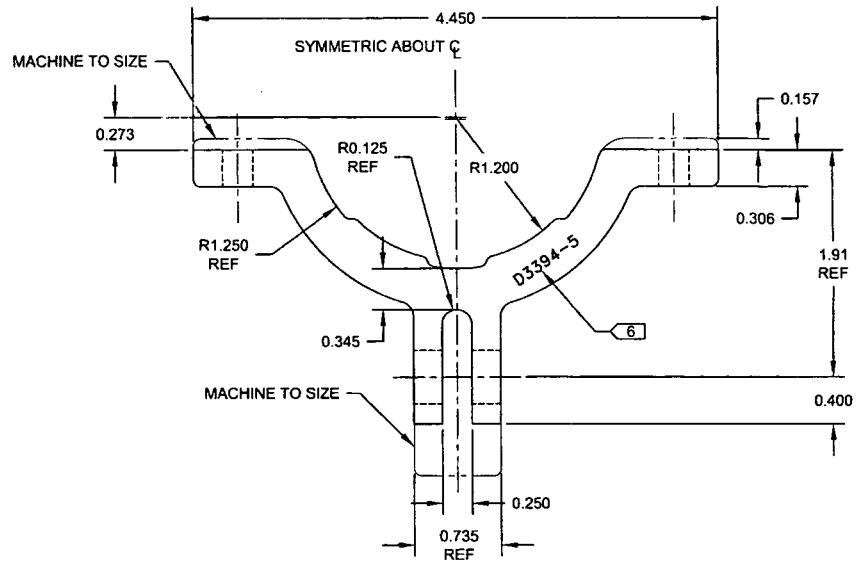
NOTES:

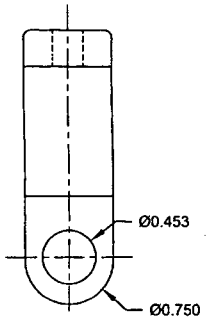
1) MATERIAL: MAKE FROM D2423
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
   POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: ENGRAVE PART NUMBER TO DEPTH OF 0.010±0.005 IN THIS LOCATION, WITH TOOL A TIP RADIUS OF 0.015±0.005
7) WEIGHT: 0.18 lbs

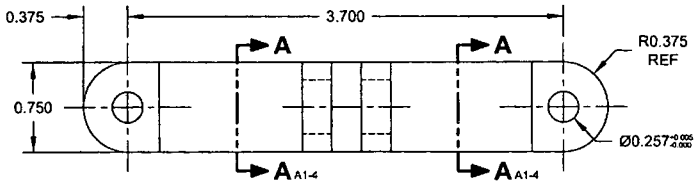
DESIGN	PH	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	AJS	
CHECKED		DRAWING NO. D3394 — REV. 8 — SHEET 3 OF 4
MFG. APPR.		
APPROVED		TITLE: LUG — SCALE: NTS
DE APPR.		
DATE	09.04.02	

COPYRIGHT © 2005 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD

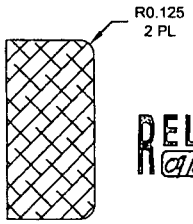
52331







D3394-5 LUG



RELEASED 01/06/25

SECTION A-A B5-2 B4-2 B5-3 B4-3 B5-4 B4-4

NOTES:

1) MATERIAL: MAKE FROM D2423
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
   POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: ENGRAVE PART NUMBER TO DEPTH OF 0.010±0.005 IN THIS LOCATION, WITH TOOL A TIP RADIUS OF 0.015±0.005
7) WEIGHT: 0.18 lbs

DESIGN	PH	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	AJS	
CHECKED		DRAWING NO. REV. B
MFG. APPR.		D3394 SHEET 4 OF 4
APPROVED		TITLE SCALE
DE APPR.		LUG NTS
DATE	09.04.02	

COPYRIGHT © 2005 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD